

REMARKS

A crucial feature of the present invention is that the cargo compartment of the aircraft contains two regions about which a unit load device (ULD) is pivoted in sequence when loading the ULD into the cargo compartment. Thus, the ULD is introduced to a first point of travel, and is then pivoted about a first pivot axis aligned within the cargo compartment. This first pivot axis is in a fixed position within the cargo compartment. Having pivoted about the first pivot axis, the ULD is then pivoted about a second pivot axis also within the cargo compartment. The second pivot axis is also in a fixed position within the cargo compartment, and is spaced from the first pivot axis. It is this movement of the ULD, in sequence, about two spaced pivot axes relative to and within the cargo compartment, which aligns the ULD inside the cargo compartment.

Claims 1, 15-17 and 19 stand rejected under 35 USC §102(b) as anticipated by Bogue et al (U.S. 4,050,655). The Examiner suggests that Bogue et al discloses loading the ULD into the cargo compartment by pivoting it about two separate pivot axes. Specifically, the Examiner states that Bogue et al shows a container in Figure 6 that pivots about one axis and then, in Figure 4, shows the container pivoted about a second axis. Applicant respectfully disagrees. During loading of the ULD into the cargo compartment, the ULD is pivoted only about a single pivot axis, and that is the axis of the pivot-stop 26 shown in Figure 4. Thus, the ULD is loaded into the cargo compartment in a direction such that the long axis of the ULD is transverse to the cargo compartment, the drive units are then rotated and operated so that the ULD impacts the pivot-stop 26 and then swings around the pivot-stop 26 (and possibly translates longitudinally along the edge of the ULD in contact with the pivot-stop) so that the long axis of the ULD is now aligned with the longitudinal axis of the cargo compartment.

Figures 5, 6, and 7 seem to suggest that when the ULD is to be unloaded from the cargo compartment then the ULD is pivoted sequentially about two pivot axes.

In the specification, column 5 at lines 25-33, there is support of the fact that the ULD, during loading, is turned only about a single pivot axis. Also in column 5, lines 48-58, it is possible to interpret Figures 5, 6 and 7 as the ULD pivoting during

unloading primarily about the pivot-stop 26, but after the forward end of the ULD has projected from the cargo compartment, to the exterior of the aircraft, there is a final few degrees of pivoting movement of the ULD about the lower left-hand corner (as depicted in Figure 6) of the ULD. In this instance, the pivot axis about which the ULD moves is not a defined axis, and is totally external to the cargo compartment. What actually happens is that at this time in the motion of the ULD, the forward (external) edge of the ULD is not in a specific predetermined location, but the drive movement of the drive units 19 R1, 19 R2, 19 Ls, and 19 L1 (in Figure 6) are operated presumably at different speeds (but this is not stated), to fully align the ULD with the cargo compartment opening. Unfortunately, the description in column 5 at lines 51-58 is far from clear as to how this final alignment of the ULD is achieved, but quite clearly if there is a second stage of pivoting movement, as there appears to be, then it is pivoting movement about an undefined axis clearly and unequivocally external to the cargo compartment.

Each of claims 1, 15-17 and 19 has been amended to more clearly state the unique two-pivot movement of the ULD which distinguishes it from the teaching of Bogue et al. In particular, a portion of the subject matter of dependent claim 2 has been incorporated into claim 1 to recite that both the first pivot axis and the second pivot axis are positioned at locations within the cargo compartment, and the first and second axes are spaced from one another. This clearly distinguishes the subject invention from the teaching of Bogue and the claims, as amended, are believed to be allowable thereover.

Claims 1-3, 6, 7 and 11 stand rejected under 35 USC §102(e) as anticipated by Wittenstein et al (U.S. 6,705,817). This rejection is also respectfully traversed in view of the amendments to claim 1 and the comments which follow.

Applicant respectfully submits that there is no teaching in Wittenstein et al that the ULD is pivoted about two separate pivot axes in the cargo compartment. In Wittenstein, the turning motion of the ULD during moving is achieved by inching the ULD forward, then pivoting the ULD for a short distance, then inching it forward, then repeating the pivoting. While it is true to say, by virtue of the inching forward movement of the ULD, that the pivot axis of the ULD itself changes, the pivot axis position in the cargo compartment, about which the ULD is moved relative to the cargo

compartment is fixed. Thus, the inching forward movement of the ULD moves the ULD forward relative to the axis so that when considered in relation to the ULD itself, the pivot axis of the ULD has moved. However, this is not the invention in the present application. In the present application, there are required to be two separate and distinct spaced pivot axes in the cargo compartment. These axes do not move in relation to the cargo compartment, and the ULD moves about these axes relative to the cargo compartment. This is not the case in Wittenstein where there is only a single pivot axis in the cargo compartment about which the ULD is moved. Thus, Wittenstein does not anticipate claim 1.

Claim 14 stands rejected under 35 USC §103(a) as unpatentable over Bogue et al in view of Dean (U.S. 6,622,846). This rejection is respectfully traversed in view of the amendment to claim 1 and the arguments set forth above. Dean does not teach the important deficiency in Bogue et al which fails to teach rotation of the ULD in the cargo compartment about two independent spaced axes. Thus, claim 14 is believed to be allowable along with claim 1 from which it depends.

The rejected claims have been amended in a manner that is believed to clearly distinguish over the primary Bogue et al and Wittenstein et al references. Claims 1-19, as amended, are now believed to be in condition for allowance and further favorable action is respectfully requested.

Respectfully submitted,

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